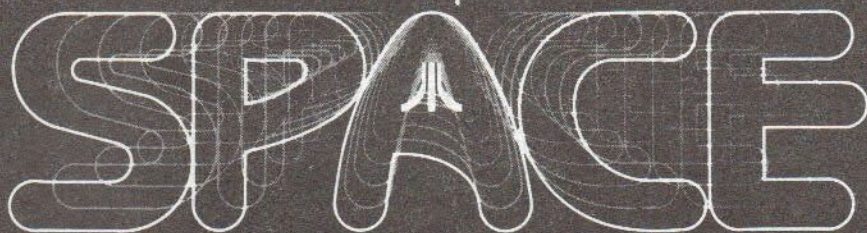


MARCH • 1988

Saint Paul ATARI Computer Enthusiasts



An independent computer user group

SPACE Meeting Friday, Mar. 11th at 7:30pm

MAST Meeting Friday, Mar. 18th at 7:30pm

At the Falcon Heights Community Center
2077 Larpenteur Avenue West

MAST+ Programmers Meeting

Monday, Mar. 21st at 7:30pm

At First Minnesota Bank Building - second floor
Lexington and Larpenteur, in back of building



Minnesota
Atari ST

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S • P • A • C • E

BYTES from the
SPACE PRES

by Larry Vanden Plas

Thanks to Bob Arko, who demonstrated a home built speech synthesizer, and Tony Walsh, who demonstrated the Software Automated Mouth (S.A.M.) at the February meeting. Those at the meeting found it very interesting. Thanks to Joe Danko, who not only delivered on everything he mentioned in the February Newsletter (a double-sided disk), but also managed to develop and slip (unadvertised) on side B a SynCalc template for both Federal and Minnesota taxes. If you want a February Disk of the Month (DOM), both User Friendly and Wizard's Work have small quantities for \$7.50 each. You can also tell Joe or Greg Peasley and get it the meeting for \$6.

A couple of months back I mentioned a request from the Twin Cities Atari Interest Group (TAIG) to share newsletters. An agreement was drawn up by the SPACE/MAST officers for them to participate in our newsletter. This would have brought you exposure to more local authors. It would also have helped TAIG who has been publishing about every other month because of the work required to get out a newsletter. The current TAIG officers wanted more control and decided there was not enough time to propose an alternative and get it implemented. It looks like this issue is definitely on hold for now. When you see or communicate with Steve Pauley, the SPACE/MAST Newsletter editor be sure to thank him for the work he has done on our newsletter and the first class job he is doing. He also runs the SPACE/MAST WEST BBS.

On a more recent note, we were contacted by TAIG about participating in an AtariFest/ShareFair. A meeting to develop ideas is scheduled a couple of days after our SPACE meeting. We are

interested in your opinions. Sent us a note, leave us a message on the BBS or call.

Our theme for the March meeting is Low priced software sampler. Let us know what you like and bring a copy so others may sample it at the meeting. One of my favorites is a program that backs up a disk in one operation, formatting and all. It makes as many copies as you wish without reloading the source or formatting the destination disks.

I miswrote last month. Our blank disks are thirty-five cents each while they last and probably the best deal in town. You may get them from the friendly folks who sell the DOM. If you have have a problem with any of the disks you buy from them, please return it to them for replacement.

See you at the meeting - Friday, March 11th, doors open about seven PM and the meeting starts about 7:30.

After Last Night
(from the VP)

by John Novotny

The February SPACE meeting is history once again, but those (few!) who attended certainly came away enriched by the really great speech synthesis demos. Many thanks for Tony Walsh and Bob Arko for their well prepared and informative presentations. Also, to Joe Danko and Greg Peasley for the neat stuff on the February DOM. One thing that didn't get off the ground was the magazine highlights. With the speech synthesis and DOM demos, time just ran out. Maybe this will be handled fairly casually during the "News & Rumors" section in upcoming meetings. Let's see how this works for March.

Speaking of March, its demo your favorite "good value for the money" software. So grab your program that fits this criteria and bring it to the SPACE meeting March 11. Also remember that if you want something else to be happening at the

meetings, or otherwise with SPACE, talk to the officers. (Should we be thinking about changing our name to St. Paul Atari Coming to an End? ..couldn't resist!).

You Woulda Thought...

by John Novotny

Part of my on-going interest in using my 8-bit ATARI involves the much worked over area of printing screen graphics. Now I'm not talking about any sophisticated applications using lasers - just your run of the mill dot matrix stuff. Up to now (and even now), I've always had a liking for the KOALA system of screen graphics design, even after they let me down by selling out and not providing for repairs of their touch tablet. Still, most everything I've done software wise for screen image graphics has not been to redo the KOALA capabilities, but rather to provide additional functions. Much of this has been with the BASIC program GWIZ (which by now many of you must be getting tired of hearing about! ..however). The idea here is that you do some things with one program, save the screen image to a disk file, and pick it up with the other program and now do its thing. This all sounds very nice but there are some problems, one of which I will describe, as well as how I overcame (or attempted to overcome) it.

The program GWIZ has only one format for saving graphics screen files, the same format as the KOALA uncompressed format (uses INSERT to save, CLEAR to load a file name D1:PICTURE). The primary mode for KOALA is the compressed mode, of which it supports several formats I've been told. Routines for loading graphics screen files in these formats have been available, but routines to generate these formats seem quite rare. Well, being generally lazy, I didn't feel like re-inventing this routine, so I thought the KOALA program could show me one format that I could use for all graphics types. My reasoning went thus - if the KOALA compress routine is pre-

sented with a screen image too complex to compress, it would store it in an uncompressed form (following some header info which has color and format type). Then all I would do in my program is repeat the same header and follow it with any uncompressed screen graphics data. Exciting stuff! Hurridly I generated a graphics screen file with the BASIC program - OPEN #1,8,0,"D:PICTURE": FOR I=0 TO 191: FOR J=1 TO 40: PUT #1,I+J: NEXT J: NEXT I: CLOSE #1. This generated the prescribed 62 sector file, and the screen image was such that no two adjacent bytes, vertically or horizontally, were the same. I loaded this uncompressed format file into KOALA, then requested a compressed mode save. Optimistically, I keyed in D7:BIGPIC, then returned to DOS to see the results. The directory indeed showed a file BIGPIC.PIC - 242 sectors long! A might heavy on overhead, me thought. I returned to KOALA and asked him to load what he had created. No complaints on his part, but then he didn't load it either. Drats, foiled again. Well, I settled for second best. I found the ATASCII code D1:PICTURE on the disk version of KOALA and changed it to D7:PICTURE. Now I can at least make the handoff without wear and tear on the disk drive. Any other ideas?

Award Ware from HiTech Expressions as reviewed by John Novotny

This is a program that provides for designing and printing a variety of one page graphics formatted as certificates, awards, coupons, and the like. There are many formats identified in the manual, and many choices of borders. However, there are only five alphabet styles, and 15 different picture graphics (plus 5 for use as seals). The program and graphics are on separate disks and work without any disk swapping if you have drives 1 and 2. All the files are standard DOS format, and the disks have no copy protection. Many printers are supported,

and the printer you select remains identified in a file (PDNAME) on the graphics disk. The program is more difficult to use than PrintShop mainly because of the need for the manual to identify the layout choices. Otherwise, selecting alphabet styles and graphics is easy from menus that give you choices by providing lists of the names - you position the cursor. The program is well behaved. It even has an END.COM (I thought this would return to DOS.. it is kind of interesting even if it doesn't). Not a bad deal for the asking price, about \$12.

When I first tried this program, I was pleasantly surprised by the higher resolution graphics (as compared to PrintShop). However, as mentioned before, the tradeoff is severe - the manual shows only 20 different graphics, and worse (because of space limitations on ATARI single density disks) only 15 for the ATARI version. There is an option in the menu which alludes to follow-on graphics disks; however, I haven't seen any available yet. Well, there is some good news for those willing to do some work. Remember that I said all files are DOS files, so its quite possible to investigate quite a bit of how things are setup without having to use any complex tools. Just displaying the directory is enough to realize that the names of the graphics files are X01.A thru X15.A. Also, looking at some of the other short files (using DOS Copy file to E:, or by loading them into a word processor), we see that a file named MGR.A contains a list of all the graphics names. And one immediately begins to suspect that their order in this file corresponds to the numbers in the file names (Xnn.A). If this is true (and we see later that this checks out), then if we know the graphics file format, we should be able to add our own graphics, or replace existing ones on a copy of the graphics disk. Using a short BASIC routine to GET bytes from the graphics files and printing them to the screen, we discover that they all start with these four bytes: 144,0,112,0. It turns out that this is

size information, two bytes each for width and height. Looking further into the graphic files, it appears that some compression is used. This is also evident because file sizes for the different graphics varies from 8 to 17 sectors (but the graphics images are the same size). Also, the graphics with the greatest amount of non-printing area have the smallest files. Looking at the graphics data again, I saw that there never are two consecutive bytes of zeros. So, I assumed the byte following following each zero was a count of zero bytes required in the graphic. With a simple BASIC routine, I expanded a file in this manner, and discovered that the resulting file had 18*14*8 bytes - this matched the size information (144/8=18 and 112=14*8). I rebuilt the file once more so that its format matched the ICON file format for my program GWIZ (see SPACE library) by preceeding the graphics data with size information in character increments (18 by 14). Now it was time to see it. I loaded the ICON with GWIZ, and it looked good! Now that we know how to bring an Award Ware graphics to the screen, its just as easy to make screen graphics into Award Ware graphics, update the graphics names file (MGR.A), and we are on our way. We now have a product that we can put ourselves into, allowing for our creativity in a much more significant way.

One more note about the graphics disk - you can make room for perhaps 4 more graphics files on a copy of this disk if you keep only the one 3 sector file (of 20) that defines the printer unique data you need. (The filename you will need to keep for your printer is in file PDNAME after you have identified your printer to the program.) I'm sure there are other enhancements you can make. For now, I'd rather not take all of the fun away from you who may become excited to pursue other ways to expand the capabilities of this program. P.S. I just saw another program from the High Tech folks called "Print It" that says its graphics are compatible

with "Award Ware" - more on this another time.



SPACE February Meeting Minutes

Recorded by Ernie Costello

1. The meeting was called to order February 12, 1988 at 7:30 PM by President Larry Vanden Plas.
2. Treasurers report: Bob Siede. January income was \$240, expenses \$205, with a balance of \$349.72.
3. President's report: Larry Vanden Plas. We now have DS/DD 100% certified disks for \$.35 each.
4. Offers and Deals. Endless Electronics has 20# 200 sheet pinfeed paper for \$1.99.
5. Service. Chris Tiggeman will be offering his 1050 write-protect switch soon.
5. Rumors: Atari's double sided disk drive has started to appear in stores! ICD is now selling and apparently supporting OSS products. Larry Flint (of Hustler fame) has bought Analog. The first issue will be out in March and all subscriptions will be extended by three months. Software developers are apparently working hard on developing products for the 80 column card.

Paper Librarian: Jim Scheib. Jim announced that donors of books and programs will receive a free DOM.

6. BBS: Bruce Haug. The BBS has been running without any problems.

7. DOM: Joe Danko demonstrated the DOM which filled both sides of the disk.

8. Demos:

(A) Joe Danko demonstrated his annual SynCalc 1987 tax template. This year's version automatically fills in many state lines from the federal input.

(B) Tony Walsh demonstrated S.A.M., the Software Automated Mouth, a classic speech synthesizer in basic for 400/800 DOS 2.0 computers.

(C) Bob Arko demonstrated an Analog speech synthesizer he modified.



SPACE Disk of the Month - 3/88

by Joe Danko and Greg Peasley

The big surprise is the menu/loader program. I stole most of it from a program called LOAD*IT by Karl Stiefvater in ANALOG #39. The rest of it is bits from the old loader and some new stuff of my own.

The MENU will load almost anything automatically:

- If you have an XL or XE it will switch out BASIC, load and execute binary files.
- If a file has an extender of ".DOC" the file will be displayed on your screen or sent to your printer if START is pressed.
- SAVED BASIC programs will be LOADED.
- LISTED BASIC programs will be ENTERED.
- DOS functions available are FORMAT, RENAME, DELETE, LOCK and UNLOCK.

Here is how the DOM disk loads. After DOS.SYS gets control it looks for a file called AUTORUN.SYS. Finding an AUTORUN.SYS, which can be any kind of binary loadable file, all our file does is write the BASIC immediate command, RUN D:MENU to the screen and execute a forced read that looks like it was keyed in. The BASIC program, MENU, loads and executes. You could actually use the AUTORUN.SYS for any BASIC program you want to run automatically after a boot by naming it 'MENU'.

This month we have a side and a half:

```
DOS  SYS 037
DUP  SYS 042
AUTORUN SYS 001
BAKMUSICBAS 012
EZREAD2 DOC 057
EZREAD2 COM 080
FONTMAKRBAS 077
MONTHL BAS 011
GINRUMMYBAS 128
HELP  DOC 024
MENU   051
ARCVIEW COM 073
004 FREE SECTORS
```



Hey Bo Bo, Look over there!
There's Alpha Tech Computers.
What ya say we go over there and
fill our picnic baskets with some
goodies for our ST..



Ask about the Atari ST

Wholesalers Club!

Alpha Tech Computers

2901 Wayzata Boulevard

Minneapolis, Minnesota 55405

(612) 374-3232 Voice

(612) 374-5307 Data

1. BAKMUSIC.BAS

This basic routine will enable you to play background music with most programs. The program uses DATA statements provided by you that conform to standard ATARI BASIC SOUND syntax.

2. EZREAD2.COM and DOC

Machine language routine to scroll forward and backward through text files.

3. FONTMAKR.BAS

BASIC character font editor. Design your own ATARI character sets.

4. MONTHL.BAS

Simple BASIC program to calculate monthly loan payments.

5. GINRUMMY.BAS

Written in BASIC, try to beat the computer at GIN RUMMY.

6. ARCVIEW.COM

Machine language utility to analyze ARC'd files. Reveals the filenames, size and compression factor.

Side B.

DOS SYS 037

AUTORUN SYS 002

BOOT TXT 005

INFTRTR HLP 032

INFTRTR BUT 011

INFILTRATOR 120

INFILTRFIL 002

498 FREE SECTORS

AUTOBOOT with BASIC: A text adventure called INFILTRATOR. If you copy this make sure you get all of the files.

The goal of the DOM library is to serve the membership with really fun and interesting S/W. If anyone has an unmet need for a program that they have seen or heard of we will try as hard as we can to get it for you. Leave a message for Joe Danko on the SPACE BBS or give me a call at 777-9500.

Last but not least, please submit any and all original or acquired public domain software to the librarians for possible addition to the LIBRARY and release on a Disk of the Month.



M • A • S • T



News from the Pres

By Jim Schulz

The partying has finished and we are still around. Before I go any farther, I would like to thank all who helped to make the MAST 2nd birthday party a success. First to Phil, for getting everything together as well as the music/Midi extravaganza. Without Phil, this party wouldn't have come off. Second, to all of the ST dealers in town for donating door prizes to our raffle. Namely, Wizard's Works, User Friendly and Alpha Tech. An extra thanks to Roger of Alpha Tech for donating both a copy of FLASH! and a copy of Kis-Term to the raffle. Finally, I can't forget Allen Frink(right AI???) and Dave Meile for Dave's help at the meeting and Allen's help with the disks and getting the cake. But finally, I want to thank the MAST membership for turning out to celebrate MAST's second birthday. Without you, MAST would not exist. Now onto bigger and better things.....

This month, MAST will hold its first software and hardware swap meet. This is great place to get a good deal on software or hardware or to get rid of that piece of software or hardware that you no longer use. The only requirements are that the software include the original disk and documentation. The MAST ST will be available up front to allow you to check out the software before you buy or trade. We will have tables in the back setup for swapping. So clean out your closets and let's make this first swap meet a success. Coming next month,..... We will let you know real soon. We already have some plans set up for the summer months, including the second MAST Midi-Maze tournament. One member, namely Steve, has suggested that we hold an Oids tournament. Any takers????? Please let me know if you are interested. You know,

Steve is tough to beat at this game. Right Steve!!!!

Disk sales..... The blank disk sales were a little slow last month. Yes, I do now have blank double-sided disks. I got a shipment of 100 disks right before the MAST meeting. The doubles are available for \$1.10 each. Also if you want disk labels, I have a box full of extra disk labels from the disks of the month. Please feel free to take as many as you want. No need to buy disks to get these. As always, all sorts of good stuff from MAST.

Newsletter..... According to Steve, we have a lot of good user-submitted articles again this month. Thank you to all who contributed and keep the reviews and articles coming. This month was to be the return of Chuck's Notes, but it looks like it got lost in the shuffle so it will return next month. Also, starting next month, we will start reviewing MAST member written software. We have quite a few good programmers in our group and it's about time that we recognize them. Already in the works is a review of Mouseemac's by Dale Schumacher and John Stanley from last month's DOM and Todd Burkey's Diskscan and HDScan from this month's DOM. Also keep those articles coming. If you have reviews, tutorials, articles, etc., all are welcome. Finally, if you have questions about the ST, write them up and bring them to the meeting. Our crack staff of experts will answer your questions and write them up for next month's newsletter.

BBS..... Oh, yes, the BBS just keeps rolling on and as busy as ever. Check out the MAST BBS this month for the latest news in weekly ST Reports and ZMAGS. We have been designated a ST Report distributor and will be listed soon in the list of ST BBSs supporting the ST Report. Check weekly for new issues as well as 80 column versions of ZMAG supporting both 8 bit and the ST with news and information. Also watch for the latest news from Germany this month as Atari announces more new equipment at the Hannover Fair. As always, lots of good

downloads, news, and information.

Surveys.... This was the month that we were going to finally find out what MAST is really like. Well, that will have to wait for next month. After two or three 18 hours days of work, this one had to be put on hold until next month so that you could get to this and my other articles. Yes, you will see it next month. I have read all of the surveys and all comments are being considered. Lots of good ideas as well. Remember, your opinions do not fall on deaf ears in MAST.

Memberships... Two things here. First, at the last MAST meeting, we found out that our membership records were not quite up to date. I have gone through all of the problems and I think everything is taken care of. If you still have a problem, talk to me or Allen at the next MAST meeting and we will take care of it. We had six new members last month as well as five renewals so MAST is growing. Speaking of renewals, a number of members have complained that they don't know when it's time to renew. Starting this month, MAST will start mailing out reminders to tell you that it's time to renew. But if you want to check now, look on the label on the back of this month's SPACE/MAST newsletter. Yes, we do listen....

ST Magazines.... Elsewhere in this issue is the first Magazine Update, listing the current issues of all Atari magazines as well as Atari Magazine news. Check here for news of a free issue of ST Informer and ST Desktop and a group subscription deal to Current Notes.....

Miscellaneous stuff..... First, Atari users can now sign up free to GENIE, the best of ST BBS, a savings of \$29.95. To sign up, dial (800)638-8369 with a modem, when you get a connection, type HHH and press Return, then type XJM11887,ATARI at the U#= prompt. Then follow the prompts for signing up. This is one good deal!!!! Second, I am still taking orders for the Universal File Selector program. The Universal File Selector is a replacement for the standard file

selector plus a whole lot more. The authors are allowing owners of the program to buy additional copies for friends at \$10.00 each. The only drawback is that updates come from the owner of the program. If you would like a copy, send me (not MAST) a check for \$10.00 plus \$0.50 postage and I will send you a copy when I get it from the authors. This is a great deal since the program sells for \$15.95. I wholeheartedly recommend this program and use it every day. Third, MAST has been designated as the official US distributor of the ST News disk from the Netherlands. Dave Meile has written to the authors and obtained nine of the back issues and has five more coming in the mail. Dave is organizing publicity right now so that it will soon be mentioned in all of the ST publications and ST BBSs. The prices which we have decided on are MAST members \$2.00 and all other \$3.00 which includes postage. The back issues will start appearing this month. Also coming real soon is the second MAST newsdisk. Dave is busy working on getting this one put together even better than before. Thanks Dave for all of your help!!!!

Before I go, don't forget this month's MAST meetings. The monthly MAST meeting this month will include MAST's first swap meet, a demo of Microsoft Write and all news and rumors from the world of Atari including the latest news from the Hannover show in Germany and the best in public domain software. On the Monday following the MAST meeting, the MAST+ programmers meeting will hear first hand about the Hannover show from MAST's Chuck Purcell fresh from his trip from Europe. This is tentatively planned right now. In addition, the general show-and-tell and questions and answers will take place. Also, the latest news from Dale on his discussions with Atari. As always, a good time for all.

Well, that's it for this month. Lots of good stuff as always. But before I go, let's look inside the envelope..... Looks pretty empty this month..... This month has been

a slow month for software releases. I have only one recommendation. If you use your ST and use your file selector, buy a copy of the Universal File Selector. This is the best utility program which I have seen for the ST. In addition to being a better file selector, it includes disk formatting with extended formats, disk free space, directory printing, file locking and unlocking, file moving with original dates maintained, file copying with original dates maintained, file renaming, directory renaming, file and directory deleting and folder creation. All this and a scroll bar to see the date and the time of each file as well. I use this program everyday and it works, need I say more. It has saved me a lot of time with the DOMs already last month. All I can say is buy this program!!!!

So that's it for March. I hope to see you all at the MAST meeting and the MAST+ programmers meeting as well as on the MAST BBS. Happy computing!!!



Children Will Play by Phil Seifert

Whew! That certainly was a lot of stuff to haul and set up at the MAST 2nd Birthday Party! I think I finally have everything all wired back up now at home and at the studio. Thank you to everyone who helped me that night. I definitely needed it. If there is enough interest, maybe we can arrange a "REAL" midi demonstration along with samples of the different types of midi software and maybe go through what might be involved in creating a song in a studio situation. Let me know if you are interested.

Lets see, what is new this month? Oh, I guess nothing all that exciting, like Gunship, Ultima IV, Alien Fires, and Hunt for Red October. Been kinda slow if you ask me. Oh? Gunship is out? Yep, and it does look like it is a fairly decent game. Much better than that other helicopter game, Super Huey, but then what would not be? Gunship is put out by Microprose,

who will be changing their name sometime soon due to an agreement with MicroPro (manufacturers of Wordstar), and retails at \$49.95. I don't know what I can really say about Ultima IV, except this is a good role playing game. In fact, it is one of the best. The graphics are not as nice as Dungeon Master or Bard's Tale, but the game play is tops in my book. For me, it is the most like playing D&D, especially when you have to think ahead of time to prepare your spell components in order to cast them. Good game. Ultima IV is written by Origin Systems but marketed by Broderbund. At least for now. It used to be that Origin Systems had an agreement with Electronic Arts for marketing purposes, but now they have abrogated the agreement. There is a not so small fight going on about this. I am not sure what my feelings are about it as I don't consider Broderbund all that great as far as supporting the Atari ST and we all know what we think about EA & Trip Hawkins. Sigh....we need another good game company like Rainbird and FTL.

Speaking of Rainbird, I heard through the grapevine somewhere they no longer have marketing rights to Universal Military Simulator. This is probably one of the best wargame program to come around in a LONG time and it was to come out for the ST very soon. I hope that the people who picked up the rights to it decided to market it here in the U.S. It would not be nice have another situation like Alternate Reality was on the 8-bit Atari. That program floated around between three or four different publishers for years before coming out. And speaking of which, I guess that Datasoft decided there was not a market for the scenario disks for Alternate Reality. They will not be making any further scenarios after they are done with the Dungeon. Almost sounds like the Infocom ploy, say you are not going to come out with something, then watch your sales go up because of panic. The software companies must have learned something from Coca Cola, right?

If you enjoyed Tom Clancy's book, The Hunt for Red October, then you might consider picking up the program. Yes, it is now available and you too can try find a defecting Russian submarine in the Atlantic. I have not played this one, but I am in the middle of the book right now and if the program is as good as the book, I think you would enjoy it very much. Released by Datasoft.

Looking for a new adventure game? Try Alien Fires from Electronic Arts. I have not had a good chance to look at it, but it is a port from the Amiga and the graphics on the back do look fairly interesting. (No Jim, it is not just because of that woman in a skin tight outfit!)

Well, that about wraps it up for this month. I am still waiting for a few things to come in so I can look at them, not the least of which is KCS ver. 1.6, an updated sequencer from Dr. T's. And I am also going around looking for more toys to play music with on my computer, like a TX-7 or MT-32 or GP-8 or..... It is a never ending battle. See you all at the next meeting!



MAST Disks of the Month

By Jim Schulz

Yes, it's time for more MAST DOMs. So let's get started by looking at last month's selection of disks.

- Doc #1 - MAST Disk Docs #1 (Complete directory of all MAST DOMS)
- #78 - Uniterm V2.0a 020 (Latest version of Uniterm with new docs)
- #151 - AIM V2.3 (Latest version of Atari Image Manager with four screens)
- #217 - Dlibs V1.1 (Latest version of C library with C source code)
- #218 - February DOM #1 (Utilities)
- #219 - February DOM #2 (Applications)
- #220 - February DOM #3 (Games)
- #221 - February DOM #4 (Shareware BASIC, and OSS Pascal and GFA files)
- #222 - Demo Disk #28 (Zoomracks II working demo with limited records)
- #223 - MouseEmacs V2.19 (Mouse-

oriented Emacs with source code)

#224 - Cyberscape Demo (Amazing movie/demo of Antic Cyber Series)

#225 - ANALOG Disk #2 (ST Programs from ANALOG Magazine)

#226 - ANALOG Disk #3 (ST Programs from ANALOG Magazine)

Well, that's our look at last month. Let's first look at some DOM news and then into this month's selection.

Party time recap.... I would first like to thank all of you for your purchases of DOMs last month. We sold quite a few disks and you helped me clean out some of my old stock. A special thanks goes out to Allen for all of his help selling the DOMs. If you bought disks at the meeting or ordered them through the mail, they should be there by the time you read this. Work has become a little bit demanding lately so my free time has been limited. I apologize for any inconvenience this has caused.

Last month's mixup.... Last month's AIM disk was not announced as a double-sided disk. That is my fault. I have had two members with only single-sided drives tell me that the disk is bad. So here is what I will do, if you bring the double-sided disk to the meeting, I will replace it with two single-sided disks at no extra charge. Also, I have heard of one complaint that the Miki Mouse Monitor program from last month's utility disk does not work. I checked the master and it works fine. If you have any problems, bring the disk back for a replacement.

Disk availability.... Now that we cleaned out the old stock, I will only stock the last six months of MAST disks at the meeting. If you want disks before that, they can be ordered at the meeting at the meeting and will be mailed within a week. I will be putting together a disk order form/raincheck with Steve's help which should make old disk ordering a little bit easier. Also, special disks from the past like Uniterm and ST Writer will remain in stock as well. A complete list of past special disks will be available next month.

Prices.... Starting this month, all MAST DOMs are \$6.00 each. In addition, the MAST news disk, the ST News disk and the doc disk are \$2.00. Updates on old disks are \$2.00 with the return of the original disk. Please note that the old disks are now priced the same as all new disks. In the months to come, we will be offering one month specials on disks from the past so stay tuned for more information.....

Doc disks.... Yes, I finally made it!!!! You probably owe this month's doc disk more to Bob Rhode than anyone else when he pleaded for it from Texas. Last month's doc disk included a complete listing of the text from the MAST DOM labels as well as three directories full of DISKTOP disk listings. This month, we will again have a new doc disk, but now with a new program. Todd Burkey has very graciously updated DISKTOP to now being called DISKSCAN with a number of new features. As a result, all DOM will be reloaded into DISKSCAN and a new doc disk released. Also, all old disks will be relabeled and renamed in the next month. In order to make it easier to find files, especially with the standard DOMs, a number of directories will be renamed and the volume labels changed to match the current labelling scheme. As always, the MAST Doc disk is only \$2.00.

ST News.... As a result of Dave Meile's letters with the authors, MAST is now the official US distributor of ST News disks. As a result, we will offer these disks to members for only \$2.00 each. This is a steal for the good information and news on each of these disks. Currently, we have one ST News disk in the library, but we now have 9 new back issues with 5 more coming in the mail. I will try to kick out as many as possible this month to get us started. Yes, another great deal from MAST!!!!

Well, that's the news for this month, so on to this month's selection of the best in public domain software....

ANALOG - Last month, I kicked out

two disks of all of the ST software from the past issues of ANALOG. Response was grim to say the least for these disks. This month, I will kick out two new disks with software from the first few issue of ST-LOG. Lots of good software here so check this stuff out!!!!

Uniterm 2.0b - Just when I thought that I could say no Uniterm this month comes yet another update. This update includes a couple of new features, 20% faster display, and some more bug fixes. So bring in your old disk and \$2.00 and get the update. More on the update at the meeting.

ST Writer Elite 2.32 - This is yet another update to ST Writer Elite. This update fixes one bug with a flaky cursor which causes the program to crash. Because the update is so minor, bring in your old disk and we will swap it for free. What a deal!!!!

ST Xformer 1.2 - Guess what??? It's back again!!! This new version of the 8 bit emulator include better monochrome support, support for both the monochrome and color version in one task, fixes a number of bugs, and support the new multi-screen resolution program, Omni Res. Plus this brand new update is free, if you bring back your original disk for a swap. What a deal on this new version of the 8 bit emulator!!!!

Filefix - Well, it had to happen.... Now that the Universal File Selector is out, someone has come up with their own. This is a better file selector with none of the bells and whistles. It allows selection of disks from a disk bar to change disks and buttons for common file extensions. This is very well done!!!! It is a desk accessory and only works in monochrome.

Runner's Revenge - Speaking of monochrome, here is another great mono game. This is a monochrome version of Lode Runner. This is very well done and fast!!!! If you like Lode Runner or even if you like high-quality games, this one is for you!!! I

have been playing it every chance that I can get. A must have for all monochrome owners!!!

Oids!!! - Speaking of games, Oids is one of the best around these days. This is a demo of Oids with a demo mode first to show you how to play followed by a short game to give you an idea of what the game plays like. Yes, this is one of the best around and very addicting!!! Check out this demo and see what you think!!!

Demo of the Month - Boy, do I have some choices this month??? Let's see there's that Amiga conversion and yes, there's that Spectrum demo and oh, yea what about that demo. Well, come to the meeting and which one I pick. I have a lot to choose from this month and I only want to show you the best!!!!

The Wall - Speaking of demos, this is a digitized music demo of music from The Wall by Pink Floyd. This rather large demo plays both the digitized music and voices through your ST speakers. If you like to hear something strange in more ways than one, check out this month's digitized music. It is really something special....

DeskPac Plus - This is a multi-feature desk accessory with a phonebook, appointment book, scientific calculator, notepad, file delete and copy, and a freeram indicator. All this plus the source code as well. This program was sold for the last six months and now the author has made everything shareware. Everything works and nothing is left out. This is really something special. Yes, yet another high-quality ST program for the cost of a public domain disk.

HDSCAN and DISKSCAN - These are new programs by MAST's own ToddBurkey. HDSCAN is a new update of the very popular hard drive maintenance program. DISKSCAN is Todd's new program that gives you the flexibility of HDSCAN, but now for maintaining records of your diskettes. I have not yet seen the new version of HDSCAN, but I do have a copy of DISKSCAN and it is must for all

owners of more than 10 diskettes. This is an updated and more featured version of DISKTOP from Todd. I know that I will be using it and the MAST library as well. So don't be left in the cold give both HDSCAN and DISKSCAN a try.

Sheet10 - How about a shareware spreadsheet program??? Yes, that's what this is. The spreadsheet includes 255 by 1280 cells and includes a number of functions. This looks like the beginning of something good. Now that we have a public domain database and word processor, we have the last piece missing from the puzzle. Check out this great new program and see what it can do for you!!!!

Baseball - Now that spring training has started, it's time to play ball with your ST. This program is called Statistically Accurate Baseball and it depends more on strategy than graphics. All players and teams are 100% accurate. It's that time again so why don't you start with a little baseball on the ST. Play Ball!!!!

Well, that's a sample of what we have for this month with more coming every day. I have so much good stuff this month that I had better stop before I fill up the whole newsletter. Check out the MAST BBS the week of the meeting of the latest update on this month's DOMs. As always, I do my best to put out as much good stuff as possible given the time that I have available. Last month for once, I did give you everything promised so I do try. But as always, expect the best from the MAST DOM.

If you can't make the meeting and would still like to get ahold of the DOM or would like to get ahold of the DOC disk, my address is

3264 Welcome Avenue North
Crystal, MN 55422

That's it for March. Yet another great month of DOMs with lots of good stuff planned for the months ahead. I hope to see you all at this month's MAST meetings and on the MAST BBS.

Magazine Update

By Jim Schulz

This is the first attempt at a monthly update of magazines and what is available when. So let's start with this month's list:

Magazin	Issue Date	Date Received
ANALOG	??????	??????
ANTIC	April 1988	March 1st
Atari Explorer	March/April '88	February 8th
Compute!	April 1988	February 29th
Compute! ST	April 1988	February 19th
Current Notes	February 1988	February 16th
ST Applications	February 1988	February 17th
START		
Special #2	February 6th	
ST Desktop	February, 1988	February 11th
ST Informer	March 1988	March 2nd
STLOG	??????	??????
ST X-Press	February 1988	February 8th
ST World	February 1988	February 10th

Now, how about some magazine news..... First, the latest news on ANALOG... ANALOG has announced that the first new issues of ANALOG and STLOG will be delayed. Because of this delay and to thank the subscribers for staying with them, ANALOG has announced that all magazine subscriptions have been extended an extra three issues. Finally, on March 2nd, ANALOG announced on Delphi that the April ANALOG will ship in just a few days. Good news, I hope. We will check up on this next month. ANTIC this month is shipping with a free introduction packet to Compuserve with a \$15.00 time credit to boot. Current Notes is currently offering a \$3.00 discount for each subscription if you are a member of a registered Atari user group. The subscription is then \$17.00 instead of the normal \$20.00. Current Notes is the best user group magazine/ newsletter available. If you are looking for either ST or 8 bit news, this one is for you. In order to get the discount, we need six members to subscribe at once. Then our name is listed in the back of each issue and all

members after that will get a \$3.00 discount. Larry has been trying for months to get interest, but to no avail. Dave Meile has been doing the same at MAST. I know of about three people who are currently willing to sign up to get the discount. The more the merrier. If you would like to see the current issue and sign up, see Larry at the SPACE meeting or Dave Meile or me at the MAST meeting. Let's get SPACE/MAST listed!!!! Also START has announced that they are adding more issues. START will now come out with 8 issues a year for the same price as 4. Subscribe now before the rates go up!! Now for some magazine freebies. ST Informer has informed me that for giving them a copy of our SPACE/MAST members all members will get a free issue of the ST Informer. Also included, I'm sure, is that you will be listed on an Atari user mailing list for mailings from other companies. I will wait two months before sending in the list if you would like your name removed. To get your name removed, see Larry or me. Otherwise, wait for your free issue of ST Informer coming this spring. Also, a new ST user-contributed newsletter has been started called The ST Desktop. As an introductory special, they are offering a free issue just for asking. To get your free issue, write to The ST Desktop, c/o Luther Miller, 487 Averill Avenue, Rochester, NY 14607. Or if you are on GENIE, send E-Mail to RED.STAR. All they want is your name and address. I got my copy in about a week. Subscription are \$7.50 for 12 issues. Check this one out.

So that's the first month's list. I hope you find this useful. If you find this useful, please let me know at the MAST meeting or via the SPACE and MAST BBSS. Remember to check here next month for the latest dates on your Atari Magazines and the latest in magazine news.



ST Editor's for 1988

By Chuck Pucell

Chuck's Note: six new ATARI-ST Editor's for 1988: Review Recently, I have been evaluating several new Editors for use both at work and at home. These included:

PUBLIC DOMAIN:

- ed.ttp Classic Un*xlike telecommunications line editor (straight forward port to ATARI from MINIX in C)
- em.ttp microEMACS3.9e for Un*x,MAC,PC's and the ATARI-ST (set-up estruct.h ifdefs for almost any C system)
- levee.ttp VI for the ATARI-ST, recently up on Usenet (specifically limited to files shorter than 32K)
- emacs.ttp microEMACS2.1+++ "mousemacs" by Schumacher/Staley ** The primary subject of this review **

PURCHASED:

- tempus.prg high performance GEM based programmers EDITOR really useful with PASCAL and/or C developers. (most successful working with LARGE src.files)
- write.prg feature-rich GEM-GDOS based letter processor, really very useful in preparing a presentation. (potentially useful POSTSCRIPT interface at hand)

My search has a totally unreasonable goal, that is, to find that one editor that can be installed on a wide variety of systems. This systems will range from big down to tiny. I found that Tempus and MSWrite(microsoft) have an excellent specialized use inside the ATARI-ST, there is slim hope of building similar systems for use elsewhere. I found that ed.ttp works nicely on the ATARI-ST, but it belongs to a previous age. Levee is an important choice, primarily because of the relationships to ed in the market, etc.

My choice is microEMACS, for I do have the source code for ports, I have installed on a variety of systems and the usage sequences finally make some sense. Both of the EMACS variants exploit

the mouse cursor control, multiple large files and extensive on-line help facilities.

My test is to use the editor, check out the facilities, examine the documentation and then try to test the limits of the editor.

microEMACS3.9e has an extensive manual, flexible on-line documentation and worldwide function library support. However, my coworker with the MEGA-ST has found an unexpected keyboard or mouse glitch to cause a very unhappy autoboot. On my part I do make use of this editor on the Apollo, the SUN and the ATARI-ST.

microEMACS2.1+++ is a new editor based on an old version of the original microEMACS lineage. Potentially, this editor should be completely public domain, making use of the Mark Johnson C as well as Dale Schumacher's dlib. The documentation is entirely on-line. Multiple files can be opened simultaneously. No bugs are apparent at this time while using the Feb'88 version. The mouse control features are expanded beyond what I use daily on microEMACS3.9e so that I have some new button sequences to learn. Exit, key and file features are similar to the aue.ttp found in the Disk-of-the-Month of about one year ago.

Neither microEMACS will deal with a 200,000 byte disassembly file that I created on the ATARI-ST, but TEMPUS handles this file well.

I'll have to figure out how to install microEMACS2.1 on the SUN and on the Apollo, then microEMACS2.1 will be the winning EDITOR.



Dungeon Master A Review

By Steve Lang

Dungeon Master, by FTL, is one of the most widely anticipated programs in the Atari ST's history. It was supposed to be out by early 1987, but the authors felt it needed some work. Well I am glad they thought this way because Dungeon Master is the best game I have ever seen.

Dungeon Master is a fantasy role-

playing game. In it you choose four characters to journey into the dungeon of the Grey Lord to recover the Firestaff and the power gem so that Lord Librasulus can enter the dungeon and stop Lord Chaos and bring about a new age of order. The game comes with twenty-four pregenerated characters with varying skill levels in four classes: Fighter, Wizard, Priest and Ninja. The pregenerated characters should suit your needs but if you want to you can slightly modify the characters giving them higher abilities but with no class ability. I have found that using the pregenerated characters works better.

After you have chosen your four characters you can journey into the dungeon. Throughout it you will find many useful objects including food, weapons, torches, and spell scrolls. The dungeon gets progressively harder as you go in deeper. The first level has few monsters and is mainly to allow you a chance to get a feel for the system. A major part of Dungeon Master is observation. In order to win you will have to scan every wall for secret switches and keyholes and scour the floors for keys that sometimes blend right in with the floor. If your torches are old and the light is dim you will not be able to notice these things so it is quite important that their is always sufficient light. When you do encounter a monster on this first level you will be exposed to Dungeon Master's superb combat system.

When you are fighting in Dungeon Master it is just like a fight in real life. You can only have as many weapons as you can carry. For instance a character can only wield an axe and a poison potion. If he wants to use his sword he will have to put away his axe take out his sword and ready it, and while you are doing this you are still being pounded on by the monsters. There are no time outs in a real fight. Also if you are in the back row you can attack hand to hand for the simple reason that you cannot reach the monsters with a melee weapon. So if you are in the rear rank you are forced to use a missile

weapon such as a bow or a thrown item like a poison dart or you can cast a spell for instance fireball or lightning bolt.

The spell system for Dungeon Master is also very good. Each spell is made up of several components which are explained in the manual. Using the scrolls found in the dungeon as your recipes you can cast the spells, but you do not need the scrolls to figure out a spell. You can think of just about any effect, for instance a poisonous cloud, and figure out how to cast it with the component description in the manual by writing down characteristics of a poison cloud: it is a gas, it is poisonous. Then read the component description and you will find out that a certain symbol represents gas and another stands for poison. Piece them together and you have your spell.

Dungeon Master is full of puzzles and it is very necessary to be able to solve them. The game is very well balanced it is not too easier nor too hard. Probably the most difficult area I have seen yet is the purple worm level. It is not the hardest level but in proportion to your character's skills it is the hardest level.

The people at FTL must also love adventure games because they give many options when you save the game. You can Save and continue playing, save and exit the program, and it also allows you to format a disk in case you don't have one ready. I can't count the number of times I wish I had had those options in other games. Also in an FTL newsletter they spoke of this game and said many things such as the fact that they fit over a megabyte of graphics (just the graphics!) on one single sided disk, they also fit the program code, all of the animation code (lots of animation in this one), and all of the other data on the one single-sided disk. A representative of FTL states that ARC is child's play to us. They also said that most of Dungeon Master's extra development time was in developing their own game making system which would allow non-programmers to write fantastic games.

FTL plans to release 4-6 games using this system every year, and if they are up to Dungeon Master's standards FTL could become a major force in the software industry.

Dungeon Master is also an incredibly popular game. In a little over a month I have heard that they have sold around 8000 copies of it, and this is with virtually no advertising and no reviews in magazines. On the GENie BBS network Dungeon Master has generated more talk than just about anything. In the month or so it has been out there have been around 300 messages in the Dungeon Master topic. Other products haven't even come close to this. Many programs that have been out for a year or so only have about 125 messages at the tops. Also on GENie the sysops started virtually a whole new category for Dungeon Master for specific hints on the game. Normally a category would cover a broad range of topics such as GAMES Category or TELECOMMUNICATIONS Category. This specific hint section also has about 250 messages and is growing by about 8 messages a day. I have also heard on GENie that pirates are not pirating this game. That they have actually decided to support this game (of course not everyone is) by purchasing it. Any program that can do that deserves some special recognition.

Is there anything bad about this game? Well a few things. First of all it is very heavily copy-protected. No commercial program can copy it at this time. This could cause some hard times for addicts whose disks get zapped as one person reported a very slow turnaround time on the return of his crashed disks (approximately 11 days), and he lived within 150 miles of FTL's headquarters. So if you are prone to crashing your disks I would have to recommend you order a backup from FTL at \$10 (25% of the programs cost!!). My second complaint is the incredibly long boot-up time for it. It seems to take forever. This is due to the compression techniques used by FTL. One thing I am

thankful they added though is the ability to restart at the last saved position without rebooting and going through the arduous waiting process. My last complaint is that there are several bugs in the end of the game in version 1.0. These are corrected in version 1.1 so make sure you have 1.1.

I highly recommend this game. It is the best game out on the ST in my opinion and the opinions of many others. If you need help on this game I should be able to help you. At this time (1-31-88). I am on the ZOOOOM level and can assist you with just about anything prior to that and by the time this is printed I should be quite a bit farther into it.

DUNGEON MASTER By FTL Games/Software Heaven P.O. Box 112489 San Diego, CA 92111



Hard Disk Notes & other Misc. Rambling

by Bill LeDuc

I decided last Christmas that it was time to do myself a favor and buy a hard disk. Working with floppy disks on the ST is really not that bad, so I never felt the pressure to get a hard disk. It just seemed like the thing to do. It wasn't as if I didn't know what it was good for. I use a hard disk on an IBM PC where I work. For the last year or more I have been watching what people bought, reading articles and listening to comments from hard disk users, preparing myself for the inevitable time when I would buy a hard disk.

My perception was that the Atari's hard disk was big, noisy, and that Atari didn't give you the extras, such as auto boot from the hard disk, flexible formatting programs, etc. Now I consider it a reliable work horse. I had access to cheap IBM type hard disks and considered building my own system with a kit from Berkeley Microsystems or ICD. That would give me a much more flexible system for future expansion and I would then have a good understanding of how it all

works in case I had to swap out a hard disk. I decided that I didn't really need expansion (too much to back-up) and I didn't like working with hardware that much.

I chose a 20mb Supra because I didn't need more than 20 mb of space. It was smaller than the Atari's and quiet. Supra gave more software extras, I knew a number of people who bought and recommended the Supra, and of course I bought it because of its short cable. Seriously, people complain about the short cable on the drives available for the Atari, but according to Supra, Atari specifications call for a 19 in. cable. I wish Supra had the guts to use a longer cable.

Performance comparisons between Atari's and Supra's 20mb hard disk show them to be roughly equal. One interesting aspect of discussions and reviews involving Atari hard disk is no mention of access time. Access time is the time it takes to move the read/write head. Typically rotational speed (how fast the disk spins) is the same (3600 rpm) on most hard disks, whereas access time varies considerably from drive to drive, so average access time is the most common means of comparing hard disk performance. In the IBM world 80ms access time is slow and 30ms is fast. The Supra's 20 mb and 30 mb drives have an average access time of 68ms and the 60mb drive 28ms.

Little did I know the fun I had in store for me when my drive was delivered. I had just recently set up two different systems with hard disks on my desk at work - a PC type and an AT type IBM PC. I used each of them for more than a month. It was literally "Plug and Play" - no formatting problems, no corrupted directories, no trouble reading files, strange errors, etc. Not the case with my ST hard disk. Let me say up front that I have no desire to have an IBM type computer at home. It is a boring, all business computer. For business use it is hard to recommend another machine, but for pure enjoyment no other computer offers more than the ST. Also,

I consider the ST to be the ultimate hacker machine and part of the fun for us hackers is heads down problem solving. What fun would it be if everything worked the first time?

The first problem I experienced was an intermittent cable problem. I am still fighting this problem even though it has been back to Supra for service. The first couple weeks I had the drive I reformatted many times for many different reasons. Programs would zap the directory, bad sectors would appear in the FAT, and other strange happenings. I think a little bad luck contributed to my problems. The last month or so things have settled down and my trust is building. I am almost ready to release some working copies of software I have on floppies.

A contributing factor to my problems is TOS support for hard disks or lack of it. There is no "CHKDSK" program. In the IBM world if you have a question about the directory structure you run "CHKDSK" to find and/or repair directory problems. Atari doesn't supply any such program. Fortunately, there are third-party programs available. Also, I did what I thought was a low-level format of my disk and still found bad sectors after I had used the disk for a while. With the many IBM hard disks I have used I have never dealt with a bad sector. IBM sold a lot of PCs without hard disks and yet the operating system included utilities to support them properly.

Now let's talk about using a hard disk with the ST. The speed of the disk I/O and having your most used software and data "ON LINE" ready for immediate access is wonderful! It is more like being connected to a mainframe. No more swapping floppies. No more waiting that excruciating time for the floppy drive to come up to speed. Compiles are almost at RAM disk speed. No more juggling files between the disk in drive A and B or the RAM disk hopping there will be enough room. A command line interface with PATH capability now makes sense with a hard disk.

The speed benefit is somewhat nullified by TOS inefficiencies. When loading programs there is a frustrating period where TOS clears memory. This will be most obvious on a 1 mb machine. The delay is more noticeable with a hard disk because now it takes longer to clear memory than to load the program. By the way, program loading speed has been improved considerably with the new ROMs.

Directory and FAT searches are also very slow. There are three things you can do to help reduce this problem. Number one, format the disk with many small logical drives. This will reduce FAT search time when you write a file. Atari allows four per physical drive. Supra supports twelve. I use pc-ditto, the IBM PC emulator, and PC-DOS only supports hard disk drives 4.2 mb or larger, so I partitioned my drive into four 4.2 mb drives and a smaller one to take up the slack.

Number two, install a good hard disk cache program for directory and FAT caching. There are basically two ways to use a disk cache program; cache just directory structures and caching all file I/O. Caching just directory structures eliminates much of the TOS inefficiencies and uses less memory than caching all I/O. If you cache all file I/O and set up a cache buffer large enough, the results will be similar to a RAM disk. Once a file is completely in the cache buffer all reads will be from the buffer. Writes with most cache programs use the write through concept. The sector written is first saved in the buffer and then is immediately written to disk. If the system crashes all file updates are intact, as compared to a RAM disk where the file would be lost. The performance improvement with directory cache is disappointing because even with the FAT completely in cache TOS spends too much time searching the FAT. The cache program I am using is DIS-CACHE from Amgem. It allows both methods of caching, does both hard disk partitions and floppy drives if you desire,

and allows you to specify how much RAM to use for each drive.

Number three, use a disk utility such as TUNEUP from Michtron to eliminate fragmented files and optimize the partition for writing. Fragmented files cause unnecessary head movement when accessing a file. File fragmentation is a natural occurrence caused by repeatedly deleting and creating files. Even more beneficial is TUNEUP's ability to optimize a partition for writing. Normally as files are added to a drive, space is used from the beginning and grows toward the end. As a drive gets full, access time is slowed (in TOS's case anyway) when a file is created because it has to search through so many FAT sectors for available space. To optimize write performance TUNEUP moves all the files toward the far end, thus FAT searches are essentially reduced to zero. After optimization, performance will slowly deteriorate as new files are added to the drive.

The following table shows performance improvements of disk cache and write optimization:

Partition size	4.2mb
Available Space	990kb
Number of Bytes Copied ...	280kb
Number of Files Copied	14
Time in seconds to copy 1 directory and 14 file from another	
State of drive partition using the Desk top	

Normal.....	62 sec
With directory cache.....	51 sec
With write optimization.....	25 sec
With write optimization & directory cache.....	17 sec

Another hard disk utility I would not be without is DLII written by Simon Poole, creator of Uniterm. It is a "do everything" hard disk utility. It is a sector and file editor with search capability, a directory checker and repair tool, it does file undelete, a file or drive sector utilization checker and more. It also includes a disk reorganizer like TUNEUP, but does not

include the the same type of write optimization. Simon's approach was to make all files in a directory contiguous. If you don't have this one get it.

No discussion about hard disk utilities would be complete without mention of hard disk back-up programs. Atari users need to know them well and use them often. I am familiar with two good ones and have little desire to look at any others because they are that good. For a very fast sector back-up I use MEG-A-MINUTE by Dan Moore and Dave Small. It was published as part of an article in Spring '87 issue of Start magazine. The program has an excellent user interface and pushes the hardware to the limit when transferring sectors between the hard disk and the floppy drive. A sector image of the hard disk partition is created on floppy in a non-GEMDOS compatible format. I can't imagine a program faster or more convenient.

If you prefer a GEMDOS compatible back-up that preserves the catalog structure of the partition on the floppy, then TURTLE, a public domain program, is an excellent choice. This program is also very fast, but loses some time because it loads a RAM disk as an intermediate step. A floppy image is created in the RAM disk and then a sector copy is done from the RAM disk. This approach is much faster than copying each file because of the slowness of dealing with the FAT and directory on a floppy drive.

Restoring a hard disk partition with MEG-A-MINUTE is just as fast as the save because it does a simple sector copy, but a restore from a TURTLE back-up is quite slow because a file copy is done from the floppy to the hard disk. I use MEG-A-MINUTE with my drive "C" because it has a hidden file for the auto boot and the rest of the files are utilities that I don't need access to individually on the back-up. It also is the only drive that I have zapped thus far, so it makes for a fast restore. I use TURTLE for the rest of my partitions because it uses less disks and I can restore

a single file if I need to.

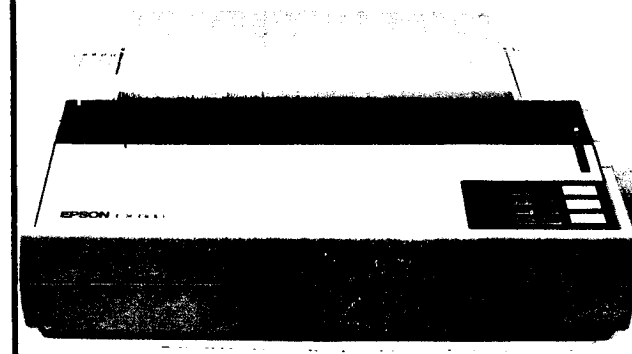
One of the first things I realized once I could forget about hard disk problems was, what do I do with desk accessories and the programs for the AUTO folder. When I was booting from floppies each disk tended to have a unique assortment of AUTO folder programs and accessories depending on the application. Some of these programs were personal preference and not essential. Others are essential. For example, some applications require GDOS in your AUTO folder. Fine, no problem, I will just boot each time with GDOS. Wrong! At first I wondered why the desk top acted a little strange. When

I was dragging files GEM seemed a little sluggish. Then I found a program that would not run with GDOS in the machine. Then it was time to pull out one of a number of public domain or shareware programs that allow you to select or change your assortment of AUTO folder and desk accessory programs at boot time. SUPERBOOT is the one I use. A fast and convenient way to deal with the problem. I have it configured so it only prompts me for changes when I boot with the ALTERNATE key pressed.

Well, that is about it. I could say more, but I am tired of writing.

**Wizard's Work
Four Seasons Mall
Plymouth, MN 55441
(612) 559-4690**

**March Special
Epson EX800 Printer
• 300 CPS
• Selectype II
Sale \$425.00**





Notes from the Editor

by Steve Pauley

Boy, it sure helps the editor when lots of people are willing to help by writing articles for the newsletter. First of all I would like to thank Steve Lang for his good review of Dungeon Master. While I'm not an adventure fan, after seeing a demo of this program at the MAST meeting, I can see why lots of people are excited about this game. Who knows maybe I'll even buy one. I would also like to thank Bill LeDuc for his nice insights on using a hard disk with the ST. At the price of Hard disk drives nowadays, one should be in every ST users future unless you all you do is play games. I also received a nice little article outlining so of the best Editor for the ST in '88, from Chuck Purcell. Thanks to all three. And while I'm on the thanks topic, I would like to thank the officers of the club who every month write tons of stuff about the club and keep the members informed. This many represents many hour of work for these people and the newsletter would not be much without them. So thanks Jim, Phil, Larry, John, Joe, Ernie, Dan and Bob Siede who takes care of the mailing list labels. As you can see each issue of the newsletter is the product of many hour of work by many people and all for free.

There are many of you in the club who still have not become involved in the club or written anything for the newsletter. How about pitching in. As you can see the newsletter needs more articles from the SPACE people.

April Newsletter Deadline

Articles

If you would like to write something for the April newsletter, you must upload it to the SPACE or MAST bbs by March 27th. If you don't have a modem maybe someone else can upload it for you. You can also mail your articles to me on a disk. I can read Atari ST, IBM and Mac disks, but not Atari 8 bit. Give me a call at 560-2917 evenings if you need more info or my address.

Ads

All ads must be received by March 27th to appear in the April issue. The Ads should be accompanied with your check for payment. Check inside front cover of this newsletter for rates and sizes.



REBIBBON RE-INKING

Jim Scheib - 721-4185

The club can re-ink most printer ribbons (black) for a small fee. There is no longer a reason to use a faded ribbon! Ribbons that can be re-inked are: \$1.00/ribbon - Spool to spool (all types) - Epson MX-80 and compatibles - Epson LX-80 and compatibles - C. Itoh Prowriter and compatibles (NEC 8023A/C) - Citizen 120 D - Panasonic - small ones that turn counter-clockwise: \$2.00/ribbon - Epson MX-100 and compatibles. Other ribbons can be attempted, too. But if you prefer, you can buy an adapter (\$8.50 + \$3.50 shipping and handling) for the club and receive half that amount in credit towards re-inkings. See Jim Scheib at the SPACE meeting, or Jim Schulz at the MAST meeting. Please pay in advance and be sure to have your ribbon(s) in a plastic bag.

ST. PAUL ATARI COMPUTER ENTHUSIASTS & MINNESOTA ATARI ST

SPACE and MAST are independent user groups of owners of ATARI Home Computers. It has been organized by local owners of ATARI computers for the purpose of mutual self assistance and sharing of information. It is open to all interested computer enthusiasts.

Benefits of memberships in the groups include monthly newsletter mailed to your home, BBS access, software demonstrations, group purchases, public domain disk(s) of the month software at low prices, reference book library, educational software library (8-bit only) with over 20 titles, personal contacts/learning, greater information and awareness on the world of ATARI, software at discounted prices from dealers, question and answer session, etc. Come to a meeting to find out more.

SPACE - 8Bit Group The SPACE meetings are devoted primarily to the 8-bit ATARI computers such as the 400, 800, 600XL, 800XL, 65XE and 130XE. There is other ATARI related news and some 16-bit news at the SPACE meetings, as well. The SPACE group meets on the second Friday of each month at the Falcon Heights Community Center, 2077 West Larpenteur Avenue, at 7:30pm. Doors open at about 7:10pm.

MAST - ST Group The MAST meetings are devoted primarily towards the ATARI 520ST, 1040ST & MEGA computers. There will be ATARI related news items covered, but not 8-bit news. The MAST group meets on the third Friday of each month at the Falcon Heights Community Center, 2077 West Larpenteur Avenue, at 7:30pm. Doors open at about 7:10pm.

MAST+ - Programming Language User Sig MAST also has a programmer's group meeting. This group has a more technical discussion regarding programming the ST computers in a variety of languages. The group meets on the Monday following the MAST meeting at the First Minnesota bank on Lexington Avenue near Larpenteur Avenue. Meeting time is 7:30, with doors opening at about 7:20pm. The entrance is in the back of the building and leads to a stairway to the second floor.

For more information, or to confirm a meeting time and location, call Larry Vanden Plas (SPACE) 636-2415 or Jim Schulz (MAST) 537-5442.

SPACE/MAST Membership Application

Name _____ Date _____

Address _____

City _____ State _____ Zip _____

Phone _____ Equipment/System Used _____

Areas of Interest _____

Check one or both: SPACE _____ MAST _____

Renewal? _____ Address Change? _____ Membership Card Given? _____

Dues: \$15.00 per year - Please enclose with Application.

Mail to: SPACE/MAST, P.O. BOX 12016, New Brighton, MN 55112

S.P.A.C.E / M.A.S.T
P.O. BOX 12016
New Brighton, MN 55112